Nextel Communications, Inc.
2001 Edmund Halley Drive, Reston, VA 20191

NEXTEL

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April 2, 2001

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Magalie R. Salas
Secretary
Federal Communications Commission
445 Twelfth Street, SW
TW-A325
Washington, DC 20554

EX PARTE

Re: CC Docket No. 94-102

Dear Ms. Salas:

On behalf of Nextel Communications, Inc. ("Nextel") and pursuant to Section 1.1206 of the Federal Communications Commission's Rules, this letter constitutes notice that on March 29, 2001 Larry Krevor and Laura Holloway of Nextel spoke via telephone with Blaise Scinto and Dan Grosh of the Wireless Telecommunications Bureau ("Bureau") regarding Nextel's pending waiver request in the above-captioned proceeding. Attached hereto is a letter to Ms. Scinto and Mr. Grosh detailing the information they requested in that conversation and providing additional support for Nextel's waiver request.

An original and two copies of this letter have been filed with the Secretary pursuant to Section 1.1206. Should any questions arise in connection with this notification, please do not hesitate to contact the undersigned.

Respectfully submitted,

NEXTEL COMMUNICATIONS, INC.

Laura L. Holloway
Director, Government Affairs

cc: Kris Monteith
Blaise Scinto
Dan Grosh
Patrick Forster

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Nextel Communications, Inc.
2001 Edmund Halley Drive, Reston, VA 20191

NEXTEL

April 2, 2001

Ms. Blaise Scinto
Mr. Dan Grosh
Wireless Telecommunications Bureau
Federal Communications Commission
445 Twelfth Street, SW
ROOM #3-C133
Washington, DC 20554

ORIGINAL

EX PARTE

Re: CC Docket No. 94-102

Dear Ms. Scinto and Mr. Grosh:

Introduction

Pursuant to our telephone conversation on March 29, 2001, Nextel Communications, Inc. ("Nextel") is providing herein additional information in support of its pending waiver request in the above-captioned proceeding.[1] On November 9, 2000, Nextel and its affiliate Nextel Partners (hereinafter collectively "Nextel") submitted a Joint Report on Phase II Location Technology Implementation and Request for Waiver ("Report") with respect to Nextel's deployment of Phase II Enhanced 911 ("E911") services. Nextel is working with its vendor Motorola, Inc. ("Motorola") to deploy Assisted-Global Positioning System ("A-GPS") handset based location technology in its future iDEN handsets to locate Nextel's 911 callers within at least 50 meters 67% of the time and within at least 150 meters 95% of the time. In fact, in Nextel's technology trials, which are discussed in greater detail below, the A-GPS capability located callers within 18 meters 67% of the time and within 52 meters 95% of the time.

Nextel and Motorola have committed to developing and deploying the A-GPS capability in Nextel handsets pursuant to the following timeline:

[1] Nextel is submitting today an *ex parte* notification in the instant docket.

(a) initial deployment beginning October 1, 2002;
(b) 10% of all new iDEN handsets sold beginning December 31, 2002;
(c) 50% of all new iDEN handsets sold beginning December 1, 2003;
(d) 100% of all new iDEN handsets sold beginning December 1, 2004; and
(e) 95% of Nextel's entire iDEN customer base by December 31, 2005.

Although A-GPS network assist infrastructure and handsets will not be ready for commercial use until 12 months after the Commission's deadline, Nextel is committing to (a) meet the Commission's ultimate December 31, 2005 deadline, and (b) provide as soon as possible accurate location information to Public Safety Answering Points ("PSAPs") to assist them in providing potentially life-saving emergency services to Nextel's subscribers. In contrast to the network overlay solutions Nextel tested, which would have provided PSAP's with less accurate location information than the rules require and only in those geographic areas where Nextel deploys the network overlay in response to a PSAP request, Nextel's deployment of A-GPS capable handsets will insure that any subscriber who purchases such a phone will benefit from Phase II enhanced accuracy anywhere in the Nextel network where the serving PSAP is capable of receiving such information.

Thus, granting the requested waiver will promote the public interest by ensuring that PSAPs taking Nextel customers' 911 calls have "[t]he life-saving advantage of being able to know accurately and quickly the location of the emergency. . ." in compliance with the Commission's accuracy requirements.[2] Implementing this solution, even with a start-up delay, provides meaningful public safety benefits by providing PSAPs the ability to locate 911 callers on Nextel's iDEN system within the most expeditious time frames available to Nextel and Motorola. In addition, Nextel has outlined a specific path to full compliance with the Commission's accuracy and handset penetration requirements, thus meeting the critical elements the Commission has stated it would consider in granting waivers of its Phase II E911 requirements.[3]

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[2] *See* Third Report and Order, CC Docket No. 94-102, 14 FCC Rcd 17388 (1999) at para. 2.

[3] *See* Fourth Memorandum Opinion and Order, CC Docket No. 94-102, FCC 99-326, released September 8, 2000, at para. 44.

In arriving at a decision to deploy A-GPS in October 2002, Nextel and Motorola evaluated the possibility of deploying an interim solution (Enhanced Observed Time Difference or "E-OTD") similar to that planned by Voicestream Wireless. Unfortunately, E-OTD demonstrated only marginal accuracy benefits over Phase I cell site location in an iDEN environment.[4] Coupled with the one-year delay E-OTD deployment would create for A-GPS deployment,[5] this marginal accuracy improvement eliminated E-OTD as a possible interim solution. Nextel firmly believes – and there appears to be little disagreement from public safety entities, given their lack of opposition in the record – that the public interest will be much better served by the rapid deployment of its accurate handset technology than by a limited, low accuracy, interim E-OTD location capability.

Nextel's Technology Trials

As Nextel described in detail in its Report, location technology vendors demonstrated only limited interest in providing a location solution for iDEN handsets and/or networks.[6] By the time Nextel was prepared to test potential solutions, there were only three technologies available for testing in Nextel's independent trial – the A-GPS handset solution, Motorola's E-OTD solution and a network overlay solution. Each was tested by independent consultants in the same geographic area, at the same time, and under the same conditions, varying the calling environments among urban, suburban, and rural, as well as indoor and near water.

As explained previously by both Motorola and Nextel,[7] the E-OTD solution could not meet the Commission's accuracy requirements on an iDEN network. The best E-OTD could accomplish, assuming that Nextel makes additional infrastructure changes to improve timing synchronization at each iDEN cell site, was 147 meters 67% of the time and 643 meters 95% of the time.[8] The network overlay solution

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[4] Differences in internal network timing accuracy and bandwidth limitations make E-OTD less accurate in an iDEN application than that predicted by Voicestream for its GSM network. *See* Comments of Motorola, filed January 5, 2001, at pp. 6-7.

[5] *See* Comments of Motorola, filed January 5, 2001, at pp. 7-8 for a discussion of the delay created by interim E-OTD deployment.

[6] Report at p. 8.

[7] *Id.* at pp. 16-18; Comments of Motorola, filed January 5, 2001, at pp. 5-7.

[8] The E-OTD results were produced in Motorola simulation testing.

also could not locate the caller within the Commission's accuracy requirements, demonstrating an accuracy of 120 meters 67% of the time and 442 meters 95% of the time.[9] These particular results, moreover, were reported after permitting post-processing of the collected data to eliminate certain data points which had been skewed by factors outside of the control of the Vendor involved, and which factors otherwise would not bear on a production system.

On the other hand, the A-GPS Phase II handset technology, which was tested at the same time and under the same conditions as the others, provided satisfactory test results in Nextel's iDEN network. Specifically, the A-GPS solution's average location accuracy across the varying environments was 18 meters 67% of the time and 52 meters 95% of the time.[10] In tests of the A-GPS capabilities where the caller was in motion, the caller was located, on average, within 18 meters 67% of the time from a freeway, within 11 meters 67% of the time from a suburban roadway and 16 meters 67% of the time from an urban roadway – all well within the Commission's Phase II handset accuracy requirements.

Thus, after months of research and analysis, Nextel's technology trials left it with only one Phase II location technology option capable of fulfilling the Commission's accuracy requirements -- the A-GPS handset based solution. Nextel and Motorola already have initiated development of this handset, including the prototyping of an A-GPS capable iDEN handset. Motorola's development of an A-GPS solution is well underway, and more importantly, currently is on schedule to support the rollout schedule set forth in Nextel's waiver request.[11]

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[9] Report at p. 17.

[10] Of the seven indoor locations where calls were made, the A-GPS phone was able to register a "fix" at two locations. The average location accuracy at these two locations was 42 meters 67 percent of the time. In the case of the network overlay trial, a fix was returned at each indoor location, but the average accuracy of those calls was in excess of 2000 meters.

[11] Although another network overlay solution provider subsequently proposed an alternative solution to Nextel, it was too late for Nextel to undertake the necessary and detailed due diligence of this solution prior to the November 9, 2000 reporting deadline. Accordingly, Nextel could not verify that this solution would meet the Commission's accuracy standards in a real-world deployment.

Achieving 95% Penetration by December 31, 2005

Nextel has committed to achieve the Commission's requirement that 95% of its customer base have A-GPS capable handsets by December 31, 2005. Given the deployment timeframes of the A-GPS iDEN handset, Nextel believes that the growth of its customer base along with handset turnover resulting from customer churn, as well as Nextel's continued introduction of new products and services such as Third Generation ("3G") technologies, new Internet applications and voice activated dialing, among others, will result in sufficient handset turnover to achieve the required penetration rates. Current Nextel and industry trends aptly demonstrate this.

Nextel's customer base today is just under seven million subscribers. At year-end 2001, Nextel anticipates its total customer base will be nine million subscribers. Assuming an industry average churn of 2.5 percent per month (or 30 percent for the year),[12] Nextel will have to add 4.5 million new subscribers this year to achieve its projected nine million year-end customer base – 2.1 million to replace those lost to churn and another 2.4 million to reach the nine million mark. Of those nine million subscribers at year end 2001, as many as *70 percent* will be using handsets purchased during 2001 – the approximately 4.5 million new users added to Nextel's system in 2001 plus the 900,000 to 1.8 million that will upgrade their existing handsets to newer, more advanced handsets in the Nextel product line.[13] Thus, assuming that a full 70 percent of Nextel's customer base is using a new handset model at the end of each year between now and 2005, essentially all of Nextel's current handset base should be replaced in the next few years. Because 50 percent of all new Nextel handsets will be A-GPS capable in 2004 and 100 percent of all new Nextel handsets will be A-GPS capable in 2005, this 70 percent per year handset turnover rate should assure a 95 percent A-GPS capable handset penetration rate by December 31, 2005.

These estimates are based on Nextel's and industry experience with churn rates, overall growth and upgrade demand as of March 2001. As noted above, Nextel anticipates upgrading its services to include competitive new features – whether new Internet capabilities, 3G technologies, voice activated dialing, dual band

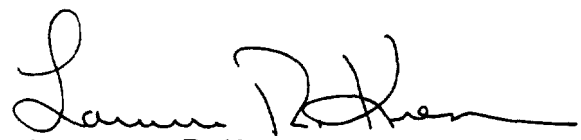
[12] For purposes of this example, Nextel is using a conservative churn rate. Today's industry average is approximately 3 percent per month.

[13] On average, ten to 20 percent of Nextel's subscribers upgrade their handsets in a given year to obtain the latest features, services and product design (*i.e.*, form factor).

800 MHz and 900 MHz phones, and/or smaller, sleeker handsets.[14] All of these advancements will promote continuation of the handset trends Nextel has experienced to date. However, should economic conditions change these patterns, resulting in the possibility that the marketplace alone will not achieve a 95 percent penetration benchmark, Nextel will re-evaluate its efforts at that time and consider any number of options, such as promotions, incentives, targeted advertising, and joint marketing with public safety spokespersons. At this time, it is premature to speculate on particular methods Nextel might use to speed consumer acceptance of the A-GPS capable handset, if necessary. Nonetheless, Nextel is committed to achieving the December 31, 2005 deadline and will undertake whatever responsible initiatives are required to achieve compliance.

I trust this letter addresses your additional questions regarding Nextel's Phase II E911 deployment and associated waiver request. If you need further information, please do not hesitate to call me.

Respectfully submitted,



Lawrence R. Krevor
Vice President – Government Affairs

cc: Kris Monteith
Patrick Forster

[14] The marketplace is demanding many of these new products and features, while others such as voice activated dialing may become a necessity as states and localities continue to turn their attention to hands-free driving regulations.